

# ***Evolution of the Flora and Fauna of Arid Australia***



*Edited by*

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# Contents

Preface .....	iii
Geological Time Scale.....	vii
<b>SECTION ONE: ECOLOGICAL AND HISTORICAL BACKGROUND .....</b>	<b>1</b>
1. The vegetation of arid Australia: a biotic appraisal. ....	<b>O.B. Williams</b> 3
2. Soil landscapes of arid Australia. ....	<b>K.H. Northcote and M.J. Wright</b> 15
3. Landform development in Australia. ....	<b>R.J. Wasson</b> 23
4. Aridity in the late Tertiary and Quaternary of Australia. ....	<b>J.M. Bowler</b> 35
5. Environmental determinants of biogeography and evolution in Terra Australis.....	<b>Henry Nix</b> 47
6. The Cainozoic palaeobotanical record in arid Australia: fossil evidence for the origin of an arid-adapted flora. ....	<b>E.M. Truswell and W.K. Harris</b> 67
7. Proteaceae and the early differentiation of the central Australian flora. ....	<b>A.R.H. Martin</b> 77
8. Late Cainozoic vertebrate faunas and the development of aridity in Australia.....	<b>Jeannette Hope</b> 85
9. Late Pleistocene aridity and aeolian landforms in Western Australia. ....	<b>J.S. Beard</b> 101
10. Central Australian sand-ridge flora 18,000 years ago: phytogeographic evidence. ....	<b>R. Buckley</b> 107
11. A review and critique of studies on the phytogeography of arid Australia. ....	<b>R.C. Carolin</b> 119
12. Selection processes in arid Australia.....	<b>P.J.M. Greenslade</b> 125
<b>SECTION TWO: PLANTS: ECOLOGICAL AND REPRODUCTIVE ADAPTATIONS.....</b>	<b>131</b>
13. Environmentally adaptive traits in arid zone plants. ....	<b>D.J. Anderson</b> 133
14. Regeneration of arid zone plants: a floristic survey. ....	<b>J.R. Maconochie</b> 141
15. Adaptation of shrub species to fires in the arid zone.....	<b>K.C. Hodgkinson and G.F. Griffin</b> 145
16. The significance of fire in the biology and evolutionary ecology of mallee <i>Eucalyptus</i> populations. ....	<b>J.C. Noble</b> 153
17. Cytogenetic systems in Australian arid zone plants.....	<b>B.A. Barlow</b> 161
18. Pollination syndromes and breeding systems of Western Australian arid zone plants. ....	<b>G.J. Keighery</b> 167
<b>SECTION THREE: VERTEBRATE ANIMALS .....</b>	<b>173</b>
19. Adaptations and evolution of the mammals of arid Australia.....	<b>P.R. Baverstock</b> 175
20. Adaptations of the red kangaroo and euro ( <i>Macropodidae</i> ) to aridity. ....	<b>M.J.S. Denny</b> 179
21. Control of mammalian and avian reproduction in the Australian arid zone, with special reference to rodents. ....	<b>W.G. Breed</b> 185
22. Origin, adaptation and evolution of birds in arid Australia. ....	<b>R. Schodde</b> 191

23. Phyletic groups within the family Agamidae (Reptilia: Lacertilia) in Australia. ....	<b>G.J. Witten</b>	225
24. Adaptation to aridity in lizards of the <i>Egernia whitei</i> species-group. ....	<b>R.P. Henzell</b>	229
25. Desert adaptations of <i>Cyclorana platycephalus</i> : an holistic approach to desert-adaptation in frogs. ....	<b>E. van Beurden</b>	235
26. Adaptations of fishes in arid Australia. ....	<b>C.J.M. Glover</b>	241
<b>SECTION FOUR: INVERTEBRATE ANIMALS</b> .....		247
27. Distribution and speciation in meat ants, <i>Iridomyrmex purpureus</i> and related species (Hymenoptera: Formicidae). ....	<b>P.J.M. Greenslade and R.B. Halliday</b>	249
28. Granivory in the Australian arid zone: diversity of harvester ants and structure of their communities. ....	<b>S.R. Morton</b>	257
29. Distribution, biology and speciation in the Australian harvester termites, <i>Drepanotermes</i> (Isoptera: Termitinae). ....	<b>J.A.L. Watson</b>	263
30. Origins of the collembolan fauna of arid Australia. ....	<b>Penelope Greenslade</b>	267
31. Adaptations to arid habitats by mygalomorph spiders. ....	<b>Barbara York Main</b>	273
<b>SECTION FIVE: PLANTS: INDIVIDUAL GROUPS</b> .....		285
32. Relationships, distribution and evolution of <i>Triodia</i> and <i>Plectrachne</i> (Gramineae). ....	<b>S.W.L. Jacobs</b>	287
33. Biogeography and evolution in the shrubby Australian species of <i>Atriplex</i> (Chenopodiaceae). ....	<b>G. A. Parr-Smith</b>	291
34. Phytogeography of <i>Acacia</i> (Leguminosae: Mimosoideae) in Central Australia. ....	<b>B.R. Maslin and S.D. Hopper</b>	301
35. Evolution and biogeography of <i>Leptosema</i> (Leguminosae: Papilionoideae). ....	<b>M.D. Crisp</b>	317
36. Distribution and evolution of <i>Euphorbia</i> and <i>Chamaesyce</i> (Euphorbiaceae) in the arid zone of Australia. ....	<b>D.C. Hassall</b>	323
37. Radiation and adaptation of <i>Dodonaea</i> (Sapindaceae) in arid Australia. ....	<b>J.G. West</b>	329
38. <i>Solanum</i> (Solanaceae) in arid Australia. ....	<b>D.E. Symon</b>	335
39. Evolution, adaptation and biogeography in arid Australian Scrophulariaceae. ....	<b>W.R. Barker</b>	341
40. Breeding systems and distribution patterns of some arid Australian genera of the subtribe Gnaphaliinae (Compositae: Inuleae). ....	<b>P.S. Short</b>	351
41. <i>Calotis</i> (Compositae), a Pliocene arid-zone genus? .....	<b>Helen M. Stace</b>	357
<b>SECTION SIX: CONCLUDING REVIEW</b> .....		369
42. Summary and reintegration. ....	<b>S. Smith-White</b>	371
Index to Plant Names .....		381
Index to Animal Names .....		387



This collection of more than 40 papers will interest all concerned with Australia's dry inland or the evolutionary history of its flora and fauna. In addition, it should appeal to those involved in the biology of arid lands outside Australia and in evolutionary studies in general.

The first of six sections provides an ecological and historical background. Subjects covered are vegetation, soils, geomorphology, new material on the development of aridity in Australia, the Cainozoic flora and vertebrate fauna of the arid zone, the role of climatic factors in determining patterns of distribution and diversity, including a new biological approach to the classification of Australian climatic environments, and a review of previous studies of the biogeography of arid Australia. A paper on selection in deserts leads to the second part dealing with reproductive and other adaptations to aridity and to fire in plants. The question of adaptation is taken up again in the section on vertebrates which treats adaptation and/or evolutionary history of mammals, birds, lizards, a frog and fishes. The account of the birds is extensive. The next two sections consist of papers mainly concerned with the biogeography, origins and evolution of a wide range of groups of terrestrial invertebrates and flowering plants, for the most part based on recent revisional studies. Three papers in the invertebrate section touch upon the two major groups in arid Australia, the ants and the termites. Among the plant genera included are *Acacia*, *Atriplex* and *Triodia* which, between them, dominate much of the arid zone. An authoritative concluding discussion by Professor S. Smith-White completes the volume.



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